

38. **The system of claim 1 wherein a handset can make outgoing calls to PSTN and receive incoming calls from PSTN, where one or more base stations can provide the PSTN connection.**
39. **The system of claim 1 wherein handsets can relay communications made by other handsets until the communication reaches a base station or the destination handset.**

Discussion on the Claim Rejections – 35 USC 102

We have read and very carefully considered the Examiner rejections of the claims in light of cited prior art.

We believe that the claims as drafted, including the amended Claim 20 as stated above, should be allowed according to 35 USC 102. We summarize our opinion as follows:

With regards to the objections of Claim 20:

Johnston et al. (US 5,787,360) discloses a system for mobile telecommunications. However, the system is limited mostly to a corporate network. The nature of the system requires each handset to have a fixed identity which includes a fixed IP address of the base station, as the identity of the handset depends on the IP address of the base. This situation is not suitable for the global Internet, as the IP address of devices on the Internet often changes. Moreover, it is desirable to have a handset identity independent of the IP address.

Johnston disclosure does not teach our disclosure, and our disclosure is not obvious: The Computerized center cannot be seen as a LAN. A LAN is merely a communication channel, and can pass messages from one IP address to another, but the LAN does not include memory means and computing power. In our disclosure, the basis of the computerized center is its ability to store the IP address of the base station and handsets (the IP address might changes over time). The intrinsic lack of memory and computer power in a LAN preclude it from working in a global and dynamic environment such as the Internet. Johnston disclosure is therefore limited to work only on controlled private network such as a corporate LAN, where the IP addresses do not change.

Another important difference between Johnston's LAN based system and our Computerized Center is that each handset in Johnston's system **must** be coupled with a single base station. As all communications pass through this base station. In Johnston et al.'s system, if a base station becomes disconnected, the handsets that are associated with this base station cannot be used. By contrast, with our proposed Computerized Center,

the calls are routed through the internet, without going through a specific base station, thus, there is no reliance on a single base station. This is not just a minor improvement over Johnston, rather a completely different system approach which is novel.

There is another difference between Johnston's LAN based system and our Computerized Center. This difference is also caused by the way Johnston et al. use the IP address of base station (In Johnston, this address *is fixed* and cannot be easily changed over time): when a handset calls another handset directly (i.e., not through a PABX) the phone number of the destination handset in Johnston **must** include the IP address of its base. This results in cumbersome phone numbers that cannot be changed as wished, and must be changed whenever the IP address of the base changes. Clearly, this solution is not applicable to global Internet or any large scale deployment (In the global Internet, the IP address of the base station can change, while it is not possible to change the identifier of the handset. It is also not possible to change the phone number of the user every time the base station reconnects to the internet or is assigned a different address). To avoid this inherent difficulty of cumbersome phone numbers that depend on the IP address, Johnston pass *all* voice communications through the PABX. Thus, the phone number of the user is its PABX phone number, and the resulting system must be used with a PABX. Moreover, if the IP address of the base changed while the handset is roaming, the handset becomes un-usable until its reconfigured with the new IP address of the base station. Therefore, Johnston entire disclosure is based on the existence of a PABX that all handsets are part of it. Therefore, the handsets in Johnston disclosure are not independent entities (i.e., each handset is strongly coupled with a base station and its IP address). In our disclosure, our novel system makes each handset an independent entity. In our Computerized Center, there is no limitation on the phone numbers.

As is described in the disclosure, the center has many functionalities that cannot be implemented by a LAN. Therefore, it is not possible to see the LAN as described by Johnston et al, as the computerized center of our disclosure.

The Internet or Intranet cannot be read as the "IP address of the base station", because the IP address of the base station in Johnston's system **must** be fixed, while this is not the general case in the Internet. This is a major difference, as detailed above (the entire system of Johnston is based on the fact that IP addresses are fixed in the LAN, and thus the IP address is made part of the identifier – or phone number - of the handset).

In Johnston's system the base station does not include means to get the appropriate IP address of the second user, rather, the IP address of the second user's base (which must be a fixed address) is contained in the phone number of the second user, which is entirely different concept than in our disclosure.

Johnston's system does not include means to establish the communications of the first user with the second user via the Internet, as the communications must also travel through a PABX. Moreover, as written above, Johnston's system is not suitable for the Internet, and can work only over a controlled network such as a corporate LAN, where the IP addresses of the base stations do not change.

CONCLUSION ON CLAIM 20:

This claim 20, as drafted above, provides entirely different system than the system disclosed by Johnston et al. It is not obvious to reach to the system as drafted in this Claim 20 from the disclosure of Johnston or any other known prior art. Therefore it should be allowed.

With regards to the objections of Claim 21:

The Computerized Center requires memory and computing power, and it cannot be seen as a LAN. For the same reason, a distributed computerized center cannot be seen as a LAN either.

With regards to the objections of Claims 22 and 28 - 29:

As a LAN is just a communication channel without memory and computing means, it cannot control the operations of base stations.

In Johnston's disclosure, the LAN merely passes messages between parties, where the IP address of both parties is known and fixed. By contrast, in our disclosure, the Computerized Center contains both memory and computing power in addition to the communication links.

With regards to the objections of Claim 23:

IEEE 802.3 and IEEE 802.12 are protocols for local area network, and they are not related to cryptographic means in the Computerized Center.

With regards to the objections of Claim 26:

In Johnston, the identifying address is merely a protocol address such as an IP address. In our disclosure, the Computerized Center monitors the *physical* location of base stations, e.g., a street address, city.

With regards to the objections of Claim 27:

Johnston et al. disclose how a handset registers with a base station, and the information is stored in the home base station of the handset. In our disclosure, the Computerized Center can track *all* the users in real-time. Holding the location of all the users in a single location is useful, e.g., for providing location-based services. Such system design is not made possible by Johnston's disclosure where the information is not concentrated in one place.

With regards to the objections of Claim 30:

As a LAN is merely a communication channel, and as a LAN does not have an IP address, it is not possible for base stations or handheld devices to communicate with the LAN. Thus, it is not possible to read the claim as suggested.

With regards to the objections of Claims 31 - 33:

These Claims 31 – 33 are based on Claim 20. Therefore, when Claim 20 is allowed, then these claims should be also allowed.

Delete Claim 32

Nevertheless, the applicant is requesting to **delete Claim 32**, as it does not add any real value.

Concerning Claim Rejection – 35 USC 103

With regards to the objections of Claims 24 - 25:

Claim 24: Niot et al. (US 6,028,849) teaches the existence of an authentication module in the base station. However, Claim 24 deals with the Center publishing the billing criteria, or billing policy in the system. Our disclosure teaches that the billing policy is then disseminated between the entities in the system, such that a handset can automatically pay the base stations that serve it (the payment can be made for example by using digital tokens). In this case, authentication to the base station is not needed, as the handset pays the base station, and the identity of the handset is not important (as long as it pays). Therefore, provided claim 20 is allowed, this claim 24 should be allowed.

Claim 25: Niot teaches that the base station and handset can agree on an encryption key based on an initial key that they pre-shared. However, in the scenario of our disclosure, the entities do not have a pre-shared initial key (and there is no point or possibility to have a pre-shared initial key between every handset and every other handset or base station). In our disclosure, the computerized center issues digital documents that are stored in the handsets and base stations, and allow these entities to establish secure communications.

Conclusion:

The system disclosed in this current disclosure is novel and can not be anticipated by Johnston et al US 5,787,360 or any other known prior art, including Niot et al US 6,028,849.

Therefore the claims as drafted, including New Claim 20 and New Claims 34 – 39 as drafted above, should be allowed.